outside of the satellite directional reception range about the respective user 2 location. 3 **REMARKS** 4 5 The Applicants respectfully request consideration and allowance of Claims 1 through 37 in light of the above amendments. 6 7 Respectfully submitted, 8 9 SHAFFER & CULBERTSON, L.L.P. 10 11 12 13 Dated: 4 June 201 14 By:\_ Russell D. Culbertson, Reg. No. 32,124 15 16 J. Nevin Shaffer, Jr., Reg. No. 29,858 1250 Capital of Texas Hwy. South 17 18 Building One, Suite 360 19 Austin, Texas 78746 20 512-327-8932 21 ATTORNEYS FOR APPLICANTS 22 pc: Ms. Sophia Collier 23 Ms. Lisa McDonald 24 I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an 25 envelope addressed to the Commissioner for Patents, Washington, DC 20231. 26 27 Date of Deposit: June 4, 2001

Reg. No. 32,124, Russell D. Culbertson



1

2

3

4

5

6

7

8

9

10

.11

12

13

14

15

16

17

18

## EXHIBIT A MARKED UP VERSION OF AMENDED CLAIMS RECEIVED

JUN 1 1 2001

Note: brackets show deletions and underlining shows additions.

**Technology** Center 2600

- 1. (Amended) An apparatus for simultaneously transmitting terrestrial signals on a common frequency with satellite signals transmitted from a satellite, the satellite transmitting satellite signals at a first frequency to a user location for reception [only] within a satellite directional reception range about the user location, the apparatus comprising: (a) a [directional] terrestrial transmitter for transmitting terrestrial signals at the first frequency [in a limited azimuth range around the location of the terrestrial transmitter], the terrestrial transmitter being located with respect to the user location such that the terrestrial transmitter transmits to the user location along a route which is outside of the satellite directional reception range. 2. (Amended) The apparatus of Claim 1 wherein satellite signals are transmitted from a plurality of satellites in geosynchronous orbit, each satellite separated from each other satellite in a geosynchronous arc by an angle greater than one half of the satellite directional reception range and the satellites together transmit satellite signals to the user location [only] within a combined satellite signal transmission range about the user location, and wherein:
  - (a) the terrestrial transmitter transmits only in directions which are outside of the

combined satellite signal transmission range and an angle equal to one half of 1 2 the satellite directional reception range outside of the boundaries of the 3 combined satellite signal transmission range. 4 5 3. (Amended) The apparatus of Claim 2 further comprising: a plurality of terrestrial [directional] transmitters, each transmitting signals at 6 (a) 7 the first frequency from a different terrestrial transmission location [and each 8 transmitting directionally in a limited azimuth range]. 9 10 7. (Amended) A method for simultaneously providing terrestrial signals on a common 11 frequency with satellite signals transmitted from a satellite, where the satellite is 12 transmitting at a first frequency along a satellite transmission axis extending from the 13 satellite to a terrestrial user location, the method comprising the steps of: 14 transmitting terrestrial signals at the first frequency [in a limited azimuth range] (a) 15 from a terrestrial transmitter, the terrestrial transmitter being located with 16 respect to the user location so as to transmit to the user location along a 17 transmission route which is outside of a satellite directional reception range 18 about the user location, wherein the satellite directional reception range 19 comprises a limited directional range [substantially centered on] encompassing 20 the satellite transmission axis. 21

(Amended) The method of Claim 7 further comprising the step of:

22

8.

transmitting terrestrial signals at the first frequency [and within a limited 1 (a) 2 terrestrial azimuth range] from a plurality of terrestrial transmitters at different 3 terrestrial locations. 4 5 12. (Amended) An apparatus for facilitating the use of terrestrial transmitted signals which are transmitted on a common frequency simultaneously with satellite signals transmitted 6 7 from a satellite, the satellite transmitting satellite signals at a first frequency to a 8 terrestrial user location along a satellite transmission axis, the apparatus comprising: 9 (a) a terrestrial transmitter for transmitting terrestrial signals at the first frequency 10 to the user location, the terrestrial transmitter being located with respect to the user location such that the terrestrial transmitter transmits to the user location 11 12 along a route which is outside of a satellite directional reception range about the user location, wherein the satellite directional reception range comprises a 13 14 limited directional range [substantially centered on] encompassing the satellite 15 transmission axis; and 16 a terrestrial receiving antenna at the user location for receiving signals at the (b) 17 first frequency only within a limited terrestrial directional reception range about 18 [a centerline of] the terrestrial antenna, the terrestrial antenna being aligned [to 19 receive signals transmitted at the first frequency] so that the terrestrial 20 <u>directional reception range encompasses the route from the terrestrial transmitter</u>

location to the user location, and being aligned so that the satellite transmission

axis is outside of the terrestrial directional reception range.

21

1 13. (Amended) The apparatus of Claim 12 wherein satellite signals are transmitted from a 2 plurality of satellites in geosynchronous orbit, each satellite separated from each other 3 satellite in a geosynchronous arc by an angle greater than an angle equal to one half of the satellite directional reception range and the satellites together transmit satellite 4 5 signals to the user location [only] within a combined satellite signal transmission range 6 about the user location, and wherein: the terrestrial transmitter transmits only in directions which are outside of the 7 (a) combined satellite signal transmission range and an angle equal to one half of 8 9 the satellite directional reception range outside of the boundaries of the 10 combined satellite signal transmission range. 11 12 14. (Amended) The apparatus of Claim 13 further comprising: 13 a plurality of terrestrial transmitters each transmitting from a different terrestrial (a) 14 transmission location [and each transmitting directionally in a limited azimuth 15 range]. 16 17 18. (Amended) An apparatus for simultaneously transmitting terrestrial signals on a 18 common frequency with satellite signals transmitted from a satellite, the satellite

comprising:

(a) a terrestrial transmitter for transmitting terrestrial signals at the first frequency

transmitting satellite signals at a first frequency to a user location for reception [only]

within a satellite directional reception range about the user location, the apparatus

19

20

21

1	from a fixed terrestrial location which forms a fixed geometry with the user
2	location and the satellite, the terrestrial transmitter being located with respect to
3	the user location such that the terrestrial transmitter transmits to the user
4	location along a route which is outside of the satellite directional reception range
5	about the user location.
6	

7

8

9

10

11

12

13

14

15

- 19. (Amended) The apparatus of Claim 18 wherein satellite signals are transmitted from a plurality of satellites in geosynchronous orbit, each satellite separated from each other satellite in a geosynchronous arc by an angle greater than one half of the satellite directional reception range and the satellites together transmit satellite signals to the user location [only] within a combined satellite signal transmission range about the user location, and wherein:
  - (a) the terrestrial transmitter transmits only in directions which are outside of the combined satellite signal transmission range and an angle equal to one half of the satellite directional reception range outside of the boundaries of the combined satellite signal transmission range.